<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Interactive Web Demo</title>

<style>

body { font-family: Arial, sans-serif; margin: 20px; }

button { padding: 10px 20px; margin: 10px; cursor: pointer; }

.hover-button:hover { background-color: #ffc107; color: #000; }

.secret-message { display: none; color: red; font-weight: bold; }

.slideshow img { max-width: 100%; height: auto; display: none; }

.slideshow img.active { display: block; animation: fade 1s; }

@keyframes fade { from { opacity: 0; } to { opacity: 1; } }

.tabs { display: flex; margin-top: 20px; }

.tab { padding: 10px; cursor: pointer; border: 1px solid #ccc; margin-right: 5px; }

.tab.active { background-color: #007bff; color: white; }

.tab-content { display: none; padding: 10px; border: 1px solid #ccc; }

.tab-content.active { display: block; animation: fade 0.5s; }

.feedback { font-size: 0.9em; color: red; }

input:valid { border: 2px solid green; }

input:invalid { border: 2px solid red; }

</style>

</head>

<body>

<h1>Interactive Web Demo</h1>

<!-- Event Handling -->

<h2>1. Event Handling</h2>

<button id="clickBtn">Click Me</button>

<button class="hover-button">Hover Over Me</button>

<div id="keypressOutput"></div>

<button id="secretBtn">Double Click Me</button>

<p class="secret-message" id="secretMsg">🎉 Secret Unlocked!</p>

<!-- Interactive Elements -->

<h2>2. Interactive Elements</h2>

<button id="colorToggle">Change My Color</button>

<div class="slideshow">

<img src="https://via.placeholder.com/300x200?text=Slide+1" class="active">

<img src="https://via.placeholder.com/300x200?text=Slide+2">

<img src="https://via.placeholder.com/300x200?text=Slide+3">

</div>

<button id="nextSlide">Next Slide</button>

<div class="tabs">

<div class="tab active" data-tab="1">Tab 1</div>

<div class="tab" data-tab="2">Tab 2</div>

</div>

<div class="tab-content active" id="tab1">Content for Tab 1</div>

<div class="tab-content" id="tab2">Content for Tab 2</div>

<!-- Form Validation -->

<h2>3. Form Validation</h2>

<form id="signupForm">

<label>Email: <input type="email" id="email" required></label><br>

<span id="emailFeedback" class="feedback"></span><br>

<label>Password: <input type="password" id="password" required minlength="8"></label><br>

<span id="passwordFeedback" class="feedback"></span><br>

<button type="submit">Sign Up</button>

</form>

<script>

// Event Handling

document.getElementById('clickBtn').addEventListener('click', () => {

alert('Button clicked!');

});

document.addEventListener('keypress', (e) => {

document.getElementById('keypressOutput').textContent = `You pressed: ${e.key}`;

});

document.getElementById('secretBtn').addEventListener('dblclick', () => {

document.getElementById('secretMsg').style.display = 'block';

});

// Change Button Color

const colorBtn = document.getElementById('colorToggle');

let toggled = false;

colorBtn.addEventListener('click', () => {

toggled = !toggled;

colorBtn.style.backgroundColor = toggled ? '#28a745' : '';

colorBtn.textContent = toggled ? 'Changed!' : 'Change My Color';

});

// Slideshow

let slideIndex = 0;

const slides = document.querySelectorAll('.slideshow img');

document.getElementById('nextSlide').addEventListener('click', () => {

slides[slideIndex].classList.remove('active');

slideIndex = (slideIndex + 1) % slides.length;

slides[slideIndex].classList.add('active');

});

// Tabs

const tabs = document.querySelectorAll('.tab');

const contents = document.querySelectorAll('.tab-content');

tabs.forEach(tab => {

tab.addEventListener('click', () => {

tabs.forEach(t => t.classList.remove('active'));

contents.forEach(c => c.classList.remove('active'));

tab.classList.add('active');

document.getElementById(`tab${tab.dataset.tab}`).classList.add('active');

});

});

// Form Validation with Real-time Feedback

const emailInput = document.getElementById('email');

const passwordInput = document.getElementById('password');

const emailFeedback = document.getElementById('emailFeedback');

const passwordFeedback = document.getElementById('passwordFeedback');

emailInput.addEventListener('input', () => {

const valid = emailInput.validity.valid;

emailFeedback.textContent = valid ? '' : 'Invalid email format';

});

passwordInput.addEventListener('input', () => {

passwordFeedback.textContent = passwordInput.value.length < 8 ? 'Password too short' : '';

});

</script>

</body>

</html>